

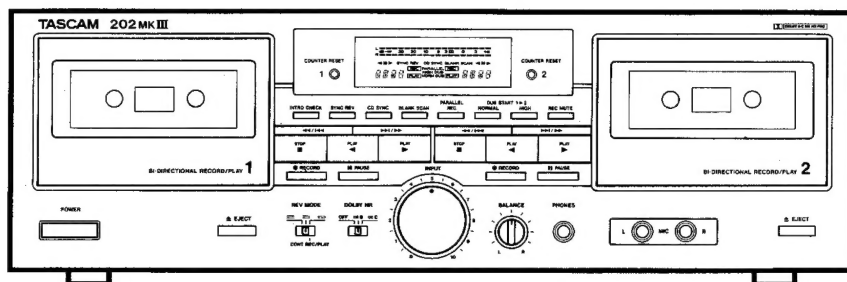
TASCAM

9101398400

TEAC Professional Division

202MKIII

Double Auto Reverse Cassette Deck



OWNER'S MANUAL



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

This appliance has a serial number located on the rear panel. Please record the model number and serial number and retain them for your records.
Model number _____
Serial number _____

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

IMPORTANT SAFETY INSTRUCTIONS

CAUTION:

- Read all of these instructions.
- Save these instructions for later use.
- Follow all warnings and instructions marked on the audio equipment.

- 1. Read Instructions** – All the safety and operating instructions should be read before the product is operated.
- 2. Retain instructions** – The safety and operating instructions should be retained for future reference.
- 3. Heed Warnings** – All warnings on the product and in the operating instructions should be adhered to.
- 4. Follow Instructions** – All operating and use instructions should be followed.
- 5. Cleaning** – Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- 6. Attachments** – Do not use attachments not recommended by the product manufacturer as they may cause hazards.
- 7. Water and Moisture** – Do not use this product near water – for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.
- 8. Accessories** – Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.
- 9. A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.**

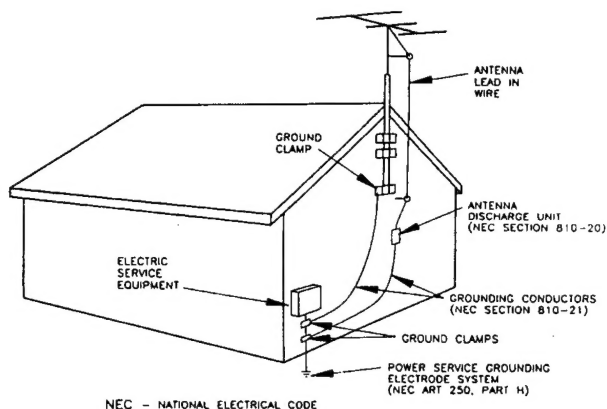


- 10. Ventilation** – Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
- 11. Power Sources** – This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.
- 12. Grounding or Polarization** – This product may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
- 13. Power-Cord Protection** – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.
- 14. Outdoor Antenna Grounding** – If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

"Note to CATV system installer:

This reminder is provided to call the CATV system installer's attention to Section 820-40 of the NEC which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical."

Example of antenna grounding as per
National Electrical Code, ANSI/NFPA 70



NEC - NATIONAL ELECTRICAL CODE

15. Lightning – For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

16. Power Lines – An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

17. Overloading – Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

18. Object and Liquid Entry – Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

19. Servicing – Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

20. Damage Requiring Service – Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- a) When the power-supply cord or plug is damaged.
- b) If liquid has been spilled, or objects have fallen into the product.
- c) If the product has been exposed to rain or water.
- d) If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- e) If the product has been dropped or damaged in any way.
- f) when the product exhibits a distinct change in performance – this indicates a need for service.

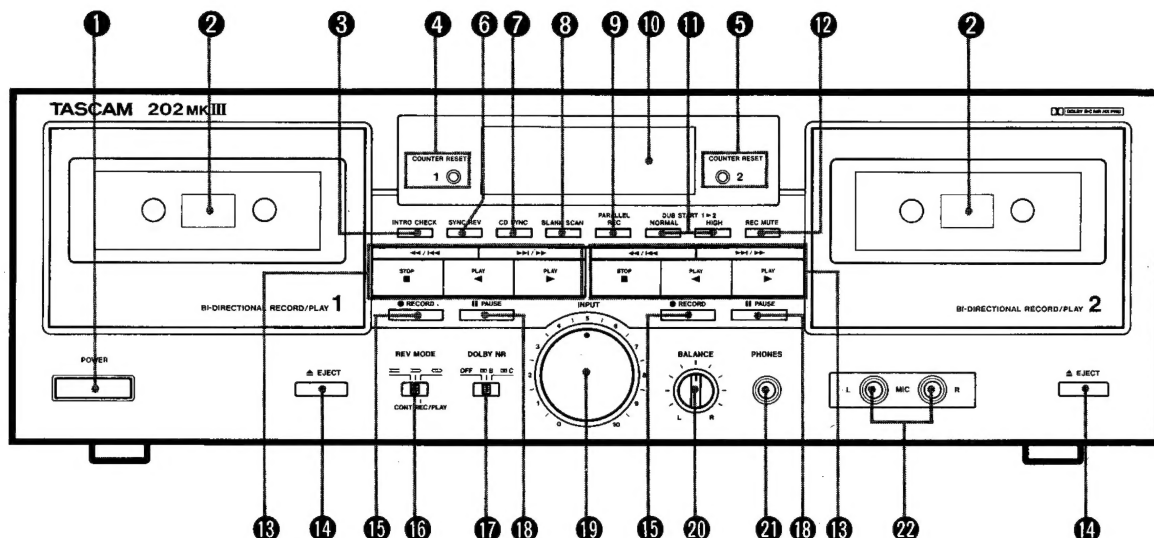
21. Replacement Parts – When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

22. Safety Check – Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

23. Wall or Ceiling Mounting – The product should be mounted to a wall or ceiling only as recommended by the manufacturer.

24. Heat – The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

FRONT PANEL



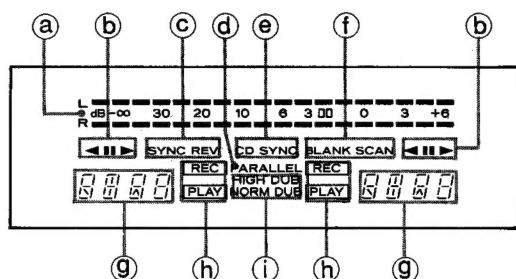
The equipment draws nominal nonoperating power from the AC outlet with its POWER switch in the OFF position.

Obs! nätströmställaren skiljer ej fela apparaten från nätet.

Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen. "DOLBY", the double-D symbol and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

- ① POWER Switch
- ② Cassette Holder (TAPE I/TAPE II)
- ③ INTRO CHECK Button
- ④ COUNTER RESET Button (TAPE I)
- ⑤ COUNTER RESET Button (TAPE II)
- ⑥ SYNC REV (Reverse) Button
- ⑦ CD SYNC Button
- ⑧ BLANK SCAN Button
- ⑨ PARALLEL REC Button
- ⑩ Display Window

- ⑨ Multi Counter
- h Mode Indicators
- i Dubbing Indicators
- 11 DUB (Dubbing) START Buttons
- 12 REC (Record) MUTE Button
- 13 Tape Operation Buttons (TAPE I/TAPE II)
- ◀◀/I◀◀ : Rewind/CPS Button
- STOP
- ◀ : Reverse Play Button
- ▶ : Forward Play Button
- ▶▶/I▶▶ : Fast Forward/CPS Button
- 14 EJECT Button (TAPE I/TAPE II)
- 15 RECORD Button
- 16 REV (Reverse) MODE Switch
- 17 DOLBY NR Select Switch
- 18 PAUSE Button
- 19 INPUT Control
- 20 BALANCE Control
- 21 PHONES Jack
- 22 MIC Jacks



- a Peak Level Meter
- b Direction & Pause Indicators
- c SYNC REV Indicator
- d PARALLEL Indicators
- e CD SYNC Indicator
- f BLANK SCAN Indicator

PRECAUTIONS

Environment

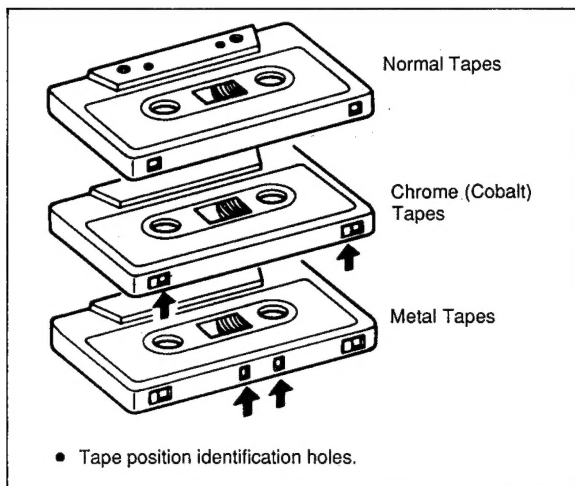
Avoid using the deck in the following conditions:

- At high temperatures (near a heater, exposed to direct sunlight, etc.).
- At extremely low temperatures.
- Where there is excessive humidity.
- In a dusty atmosphere.
- Where power line voltage fluctuations are severe (in which case the use of a voltage regulator may be advisable).

Cassette Tape

Tape Selection:

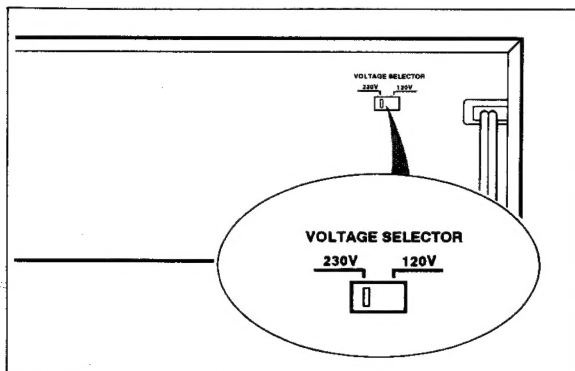
For the automatic tape select function to work properly, metal and chrome (cobalt) tapes must have identification holes.



Voltage Conversion (General export models only)

Be sure to remove the power cord from the AC outlet before repositioning the voltage converter switch.

1. Locate the voltage selector on the rear panel.
2. Using a flat-bladed screwdriver, set to the appropriate 230 V or 120 V position according to your area.



Tape Handling:

Do not store tapes in the following places:

- On top of heaters, exposed to direct sunlight or in any other places with high temperatures.
- Near speakers, on TV sets or amplifiers or where they would be exposed to strong magnetic fields.
- Where humidity is high and in dirty, dusty places.
- Avoid dropping or subjecting cassettes to excessive shocks.
- As C-120 tapes are physically weak and could become entangled in the transport mechanism, do not use them.

IMPORTANT (for U.K. Customers)

DO NOT cut off the mains plug from this equipment. If the plug fitted is not suitable for the power points in your home or the cable is too short to reach a power point, then obtain an appropriate safety approved extension lead or consult your dealer.

If nonetheless the mains plug is cut off, remove the fuse and dispose of the plug immediately, to avoid a possible shock hazard by inadvertent connection to the mains supply.

If this product is not provided with a mains plug, or one has to be fitted, then follow the instructions given below:

IMPORTANT. DO NOT make any connection to the larger terminal which is marked with the letter E or by the safety earth symbol \equiv or coloured GREEN or GREEN-and-YELLOW.

The wires in the mains lead on this product are coloured in accordance with the following code:

BLUE: NEUTRAL
BROWN: LIVE

As these colours may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

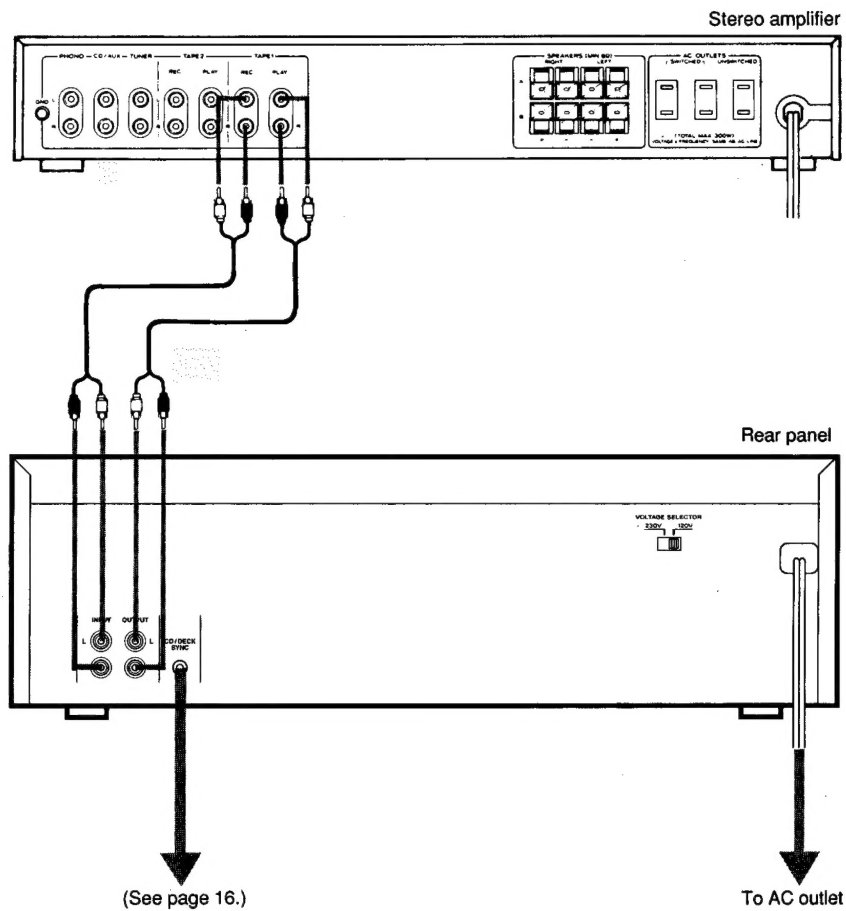
The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

When replacing the fuse only a correctly rated approved type should be used and be sure to re-fit the fuse cover.

IF IN DOUBT — CONSULT A COMPETENT ELECTRICIAN.

CONNECTIONS

- Turn off the power switches of all equipment before making connections.
- Read the instructions of each component you intend to use with the deck.



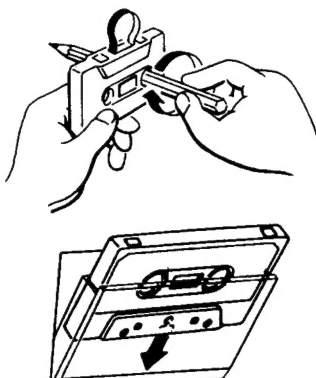
OPERATIONS

Loading a Cassette Tape

- 1 Use your finger or a pencil to turn the cassette's hub and take up any slack tape.

Note: Avoid touching the tape. Fingerprints attract dust and dirt.

- 2 Press the eject button (EJECT)* to open the cassette compartment door.
- 3 Load the cassette tape with its open edge facing down.
- 4 Gently close the compartment door.



*** Notes:**

- The cassette holder cannot be opened during recording or playback.

Tape Travel Depending on Setting of REV MODE Switch

Setting	Tape Travel	
	<p>Beginning Side B End Start Stop</p> <p>Stop Start End Side A Beginning</p>	<p>When the tape reaches the end, playback or recording is released.</p>
	<p>Beginning Side B ② End Start Stop</p> <p>End ① Start Side A Beginning</p>	<ol style="list-style-type: none"> ① During forward play or recording, when the end of tape is reached, the direction of tape running is reversed to play or record in the opposite direction. Reverse play or recording will continue to the end of the other side, at which point play or recording is released. ② During reverse play or recording, when the tape reaches the end, play or recording is released.
	PLAY mode (Tapes loaded in TAPE I or II)	
	<p>Beginning Side B End Start Start</p> <p>End Side A Beginning</p>	<p>During either forward or reverse play, when the end of tape is reached, the direction of tape running is reversed and play continues in the opposite direction. In this way, the two sides of the tape are played back continuously; the tape will stop after 5 cycles.</p>
	RECORD mode (TAPE II or TAPE I)	
	<p>Beginning Side B End Start Stop</p> <p>End Side A Beginning</p>	<p>• Operation is same as .</p>
<p>*CONT PLAY (Continuous Playback) and CONT RECORDING (Continuous Recording) — Refer to "Continuous Playback" and "Continuous Recording (TAPE I to TAPE II)" on pages 8 and 12.</p>		

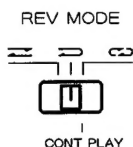
Playback with TAPE I or TAPE II

1. Press the POWER switch to ON.

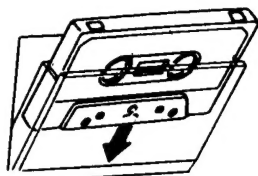
POWER



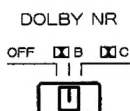
2. Set the REV MODE switch to the required tape travel mode, referring to the chart "Tape Travel Depending on Setting of REV MODE Switch" on page 7.



3. Load a pre-recorded cassette in TAPE I or II.



4. Select the appropriate DOLBY NR system.



5. Press the ◀ or ▶ button for TAPE I or II to start playback.



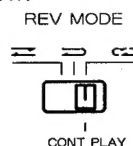
6. Adjust the volume with the amplifier's volume control.
 - To stop playback, press the STOP button.

Continuous Playback

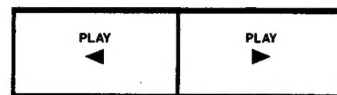
1. Load pre-recorded cassettes in TAPE I and TAPE II.



2. Set the necessary controls and switches but not the ◀ or ▶ buttons, referring to "Playback with TAPE I or TAPE II" on the left.
3. Set the REV MODE switch to the CONT PLAY (▶) position.



4. Press the ◀ or ▶ button of the deck to be played back first.

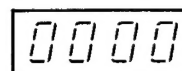


5. Tapes will be played back continuously, according to the chart on page 9.
 - To stop continuous play before 5 cycles have been completed, press the STOP button of either deck.

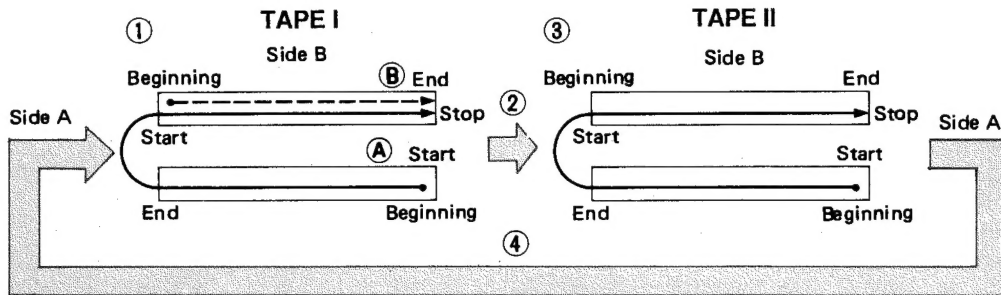
Multi-Counter

Tape Counter Mode

In this mode, the counter functions as a conventional tape counter, counting up when the tape is moving forward and down when the tape is being rewound. The display can be cleared by pressing the COUNTER CLEAR button, which resets the counter index to "0000".



Continuous Playback Operation



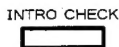
- ① ④ When playback starts in the forward direction, at the end of tape, the tape is reversed to play the other side. At the end of this side, playback is released.
- ② ③ When playback starts in the reverse direction, at the end of tape, TAPE I is released.

- ② Control is transferred to TAPE II.
 - ③ Playback starts in the forward direction; at the end of tape, it is reversed and the other side is played back.
 - ④ At the end of tape, control is transferred back to TAPE I, which plays both sides.
- This sequence ① - ④ is repeated for 5 cycles.

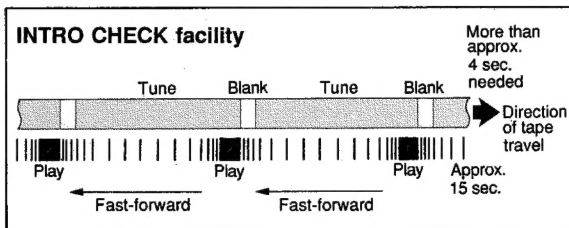
INTRO CHECK Facility

This facility makes searching for a specific tune much easier by continuously detecting the beginning of each tune.

1. Press the INTRO CHECK button.



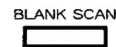
2. The deck will fast-wind to the beginning of a tune, play the first 15 seconds (approx.), and fast-wind to the beginning of the next tune, from which point the cycle starts again.
3. If the play button of TAPE I is pressed during the Intro Check operation, playback will resume.



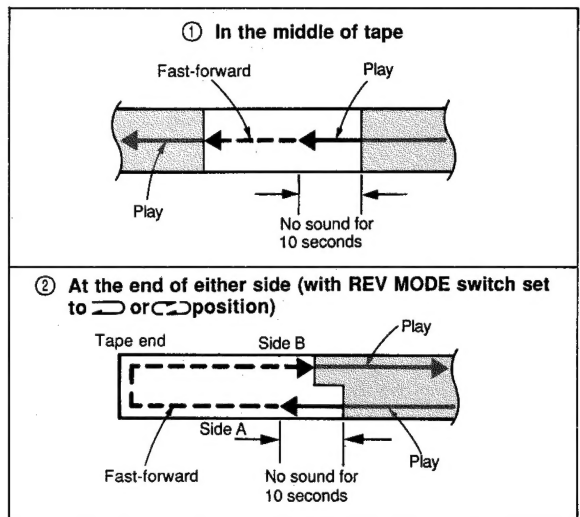
Blank Scan Facility

This facility is provided so that the deck will skip long blank portions during playback.

1. During playback, press the BLANK SCAN button (the indicator lights).






2. If a blank section of more than about 10 seconds is detected during playback, the deck will enter the fast-forward mode automatically until the beginning of the next recorded section is detected, at which point playback will resume.











4. If the STOP button is not pressed, the Intro Check function is released depending on the setting of the REV MODE switch.
 - ⏮ : Released when tape reaches the end.
 - ⏪ : Released when tape reaches the end on the reverse side.
 - ⏩ : Released after completing one full loop of the tape from the initial side.

3. To release blank scan, press the BLANK SCAN button again (the indicator goes off).

Notes:

- With the REV MODE switch set to the  or  position, when the BLANK SCAN button is engaged, the tape will be fast-forwarded at the end of either side of the tape after running the tape for 10 seconds without any sound. (See the figure ② above.)
- To check if the tape is entirely blank, start blank scan at the beginning of either side with the REV MODE switch set to the  position.
- If there are sections of tape recorded at a low signal level, because of fading out, etc., these sections may be detected as blank and blank scan may start, in which case the music will be interrupted for about 10 seconds.

1. During forward playback, press the  or  button repeatedly until the number of tunes to be skipped appears in the counter display. Use the  button for searching a tune following the current tune and  button for a tune before the current tune. Refer to the chart "How to Select any Required Tune Using CPS".
 - If, by using the  the required CPS number setting is exceeded, use the  button to count down the CPS number until the required CPS number is displayed.
 - When the  button is pressed, the next tune is counted as "1" and when the  button is pressed, the current tune is counted as "1".
2. The tape is fast-wound to detect blanks between tunes until the required tune is reached. Then playback starts from the beginning of the designated tune.

Notes on CPS

CPS operates by detecting and counting blanks of about 4 seconds, the standard interval between tunes. Therefore, with the following types of tapes, search functions may not work correctly.


- When the intervals between tunes cannot be detected.
 - Intervals of less than 4 seconds.
 - High levels of noise in intervals.
 - Long low level sections (in classical music, etc.)

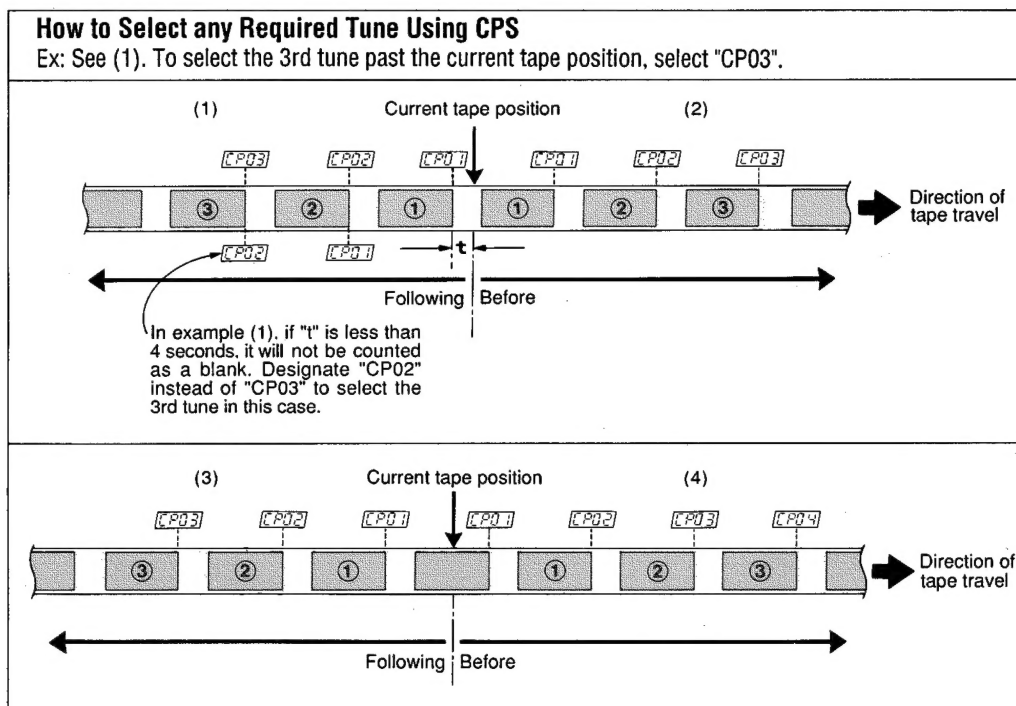
This problem can be corrected using the REC MUTE function.

CPS (Computomatic Program Search) Function

CPS allows the selection and playback of any tune up to 20 tunes ahead or before the one being played. This function operates by detecting blank spaces of at least 4 seconds between tunes. These blanks can be created using the REC MUTE Function.

Note:

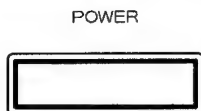
In the following steps 1 and 2, to simplify the description, the explanation is given for "forward playback" ( direction). A similar procedure should be used for "reverse playback".




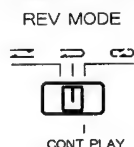
Recording with TAPE I and TAPE II


Recording from a stereo system:

1. Press the POWER switch to ON.

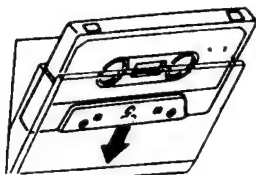


2. If you want to make a bi-directional recording, set the REV MODE switch to the  position.

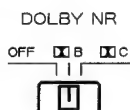


*Set to the  position if recording is to be made on a single side of the tape.

3. Load a recordable cassette in TAPE I or II.
 - Check that the safety tabs on the spine of the cassette are in place. If they have been broken off, block the holes with adhesive tape.



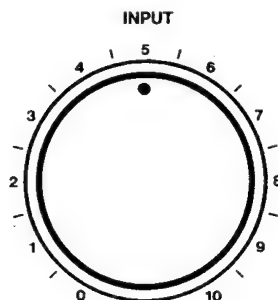
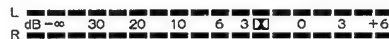
4. Select the desired DOLBY NR system.



5. Press the RECORD button and the deck enters the record-pause mode (both indicators lit).



6. Adjust the recording level with the INPUT control so that the loudest sound to be recorded just makes the meters briefly reach around the "0 dB" point (for Normal or Chrome tapes) or the "+3 dB" point (for Metal tapes).



7. To adjust the balance of the input signal, use the BALANCE control.



8. Press the PAUSE button again to start recording.
 - To stop recording temporarily, press the PAUSE button. To restart the tape, press the PAUSE button or play button. During the record-pause mode, if the button whose ◀, ▶ indicator is lit is pressed, recording will start; however, if the button whose ◀, ▶ indicator is not lit is pressed, only the tape direction will change; to restart the tape, press the button again.



- To stop recording, press the STOP button.

Erasing

Anything previously recorded on the tape will automatically be erased when you make a new recording on it. It can also be erased by "recording" on it with the REC LEVEL control set to "0".

Record Muting Operation (TAPE I and TAPE II)



- **Automatic spacing operation for 4-second blanks (during recording)**

Press the REC MUTE button during recording. The tape movement continues and a blank space of about 4 seconds is recorded (the RECORD indicator blinks). The deck then enters the record-pause mode automatically (both the RECORD and PAUSE indicators light).

To restart recording, press the PAUSE button (the PAUSE indicator goes off).

- **Automatic spacing operation for 4-second blanks (during record-pause)**

In the record-pause mode, pressing the REC MUTE button will initiate the above record-muting operation automatically. The deck then returns to the record-pause mode.

- **For a blank of more than 4 seconds**

During recording, hold the REC MUTE button depressed for longer than 4 seconds. A blank space will be left as long as the button is pressed. Release the button to enter the record-pause mode. To restart recording, press the PAUSE button.

- **For a blank of less than 4 seconds**

After pressing the REC MUTE button during recording, press the PAUSE button before 4 seconds has elapsed. The deck will stop and enter the record-pause mode at the point at which the PAUSE button is pressed. To restart recording, press the PAUSE button again.

Note:

- During record muting operation (while the RECORD indicator is blinking), pressing the REC MUTE button again will release the record muting operation and recording will restart without stopping the tape.

Parallel Recording


A single program source can be recorded onto the two cassettes simultaneously.

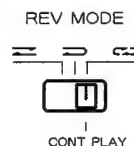
1. Perform steps 1 to 7 described in "Recording with TAPE I and TAPE II" except that in step 3, load cassettes into both TAPE I and TAPE II. (See page 11.)
2. Press the PARALLEL REC button.

Notes:

- Recording will start in the direction indicated by the direction indicator; therefore, set the direction beforehand.
- During recording, only STOP button of TAPE I operates and the STOP, REC MUTE and PAUSE buttons of TAPE II work.
- If the STOP button is pressed, both TAPE I and TAPE II will stop to end recording.

Continuous Recording (TAPE I to TAPE II)

1. Load two recordable cassettes on both TAPES I and II.
2. Set the NR SYSTEM, etc. as required.
3. Set the REV MODE switch to the  position.



4. Press the RECORD button, then PAUSE (or play) button of TAPE I to start recording.
5. After recording with TAPE I is completed, TAPE II starts recording automatically in the forward direction.
6. To clear the continuous recording mode, press the STOP button.

Notes:

- In continuous recording, since recording with TAPE II always begins in the forward direction, make sure the cassette loaded in TAPE II can be recorded on both sides.
- If the tape running direction is set to reverse side of TAPE I, recording will be done on only the reverse side of the tape loaded in TAPE I.
- Continuous recording from TAPE II to TAPE I is impossible.

Recording Using Microphone

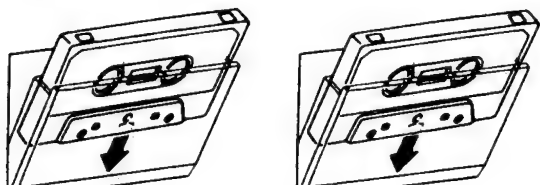
When using a microphone, plug a microphone equipped with a standard phone plug into the MIC jack on the front panel. For the recording procedure, refer to "Recording with TAPE I and TAPE II" on page 11.

Note: If the microphone is connected, the LINE IN input corresponding to the channel to which the microphone is connected will be cut off.

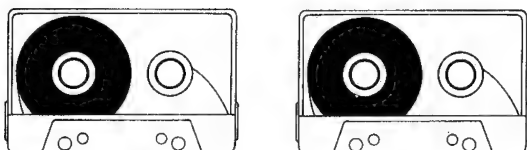
Dubbing (Copying from TAPE I to TAPE II)

To dub the entire recorded section of a pre-recorded cassette

1. Press the POWER switch to ON.
2. Load the pre-recorded cassette into TAPE I and a recordable cassette into TAPE II.



3. Fully rewind both cassettes so their tapes are taken up on their left reels.



4. Set the REV MODE switch to the desired position.

⏮ : Dubbing will be performed for one side only.

⏪ : Dubbing will be stopped after both sides have been dubbed.

5. See that both decks are set to the ► direction.



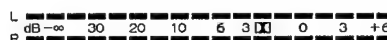
6. Press the DUB START HIGH or NORMAL button to start dubbing. The indicator corresponding to the button pressed will light.

NORMAL: Dubbing is performed at normal speed.

HIGH: Dubbing is performed at twice normal speed.




7. The peak level meter indicates the TAPE I signal levels; the recording levels of TAPE II will be set automatically (at the same levels as TAPE I).

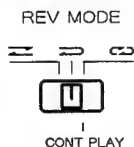


8. After dubbing is completed, both decks stop automatically, according to the setting of the REV MODE button.
9. To stop dubbing, press either of the STOP buttons.
 - If one of the tapes reaches the end, both decks will stop.

Synchro reverse dubbing

The SYNC REV button allows both decks to be reversed at exactly the same time during dubbing. This function is convenient when using tapes with different lengths, to dub a tape with exactly the same contents as the original.

1. Set the tape running direction of both decks to the ► (forward) direction, and set the REV MODE switch to the  position.



2. Press the SYNC REV button (the indicator will light).




3. Press either of DUB START buttons (HIGH or NORMAL).



4. The tapes in TAPE I and II travel as illustrated in the chart "Synchro Reverse Dubbing Operation" on page 14.

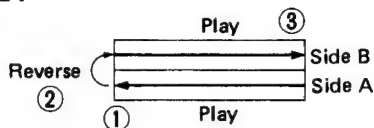
Notes:

- Synchro Reverse Dubbing mode can be entered only when the REV MODE switch is in the  position and the direction indicators of both TAPE I and TAPE II are ►.
- If the original tape is shorter than the dubbed tape, blank sections will be left at both ends of the dubbed tape. To prevent this, use tapes with the same length whenever possible.

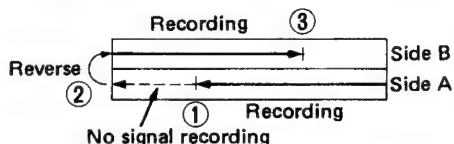
Synchro Reverse Dubbing Operation

TAPE I tape shorter than TAPE II

TAPE I



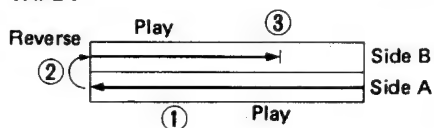
TAPE II



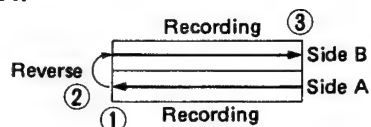
- ① When TAPE I reaches the end of the forward side, TAPE I stops and TAPE II enters the "no signal recording" mode.
- ② When TAPE II reaches the end, both TAPE I and II are reversed simultaneously then TAPE I resumes reverse play and TAPE II resumes recording.
- ③ When TAPE I reaches the end of the reverse side, both TAPE I and II stop simultaneously.

TAPE I tape longer than TAPE II

TAPE I



TAPE II



- ① When TAPE II reaches the end of forward side, TAPE II enters the record-pause mode for the reverse side, while TAPE I continues playback.
- ② When TAPE I reaches the end, TAPE I and II start reverse play and recording simultaneously.
- ③ When TAPE II reaches the end of the reverse side, both TAPE I and II stop simultaneously.

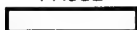
Manual Editing with REC MUTE and PAUSE (TAPE II only)

During normal-speed dubbing, you can edit the dubbed tape as required using the REC MUTE and PAUSE buttons. For example, you can record only the required tunes from TAPE I to TAPE II skipping unwanted tunes.

REC MUTE



PAUSE



- When the PAUSE button (TAPE II) is pressed, TAPE II enters the record-pause mode while TAPE I continues playback. While listening to the sound from TAPE I, when it reaches a section you want to dub, press the PAUSE button (TAPE II) again to restart recording on TAPE II.
- When the REC MUTE button (TAPE II) is pressed, TAPE II enters the record muting operation as in normal recording. To restart recording on TAPE II, press the PAUSE button.

CAUTION:

Recording pre-recorded tapes, records, or other published or broadcast material may infringe copyright laws. Check before recording.

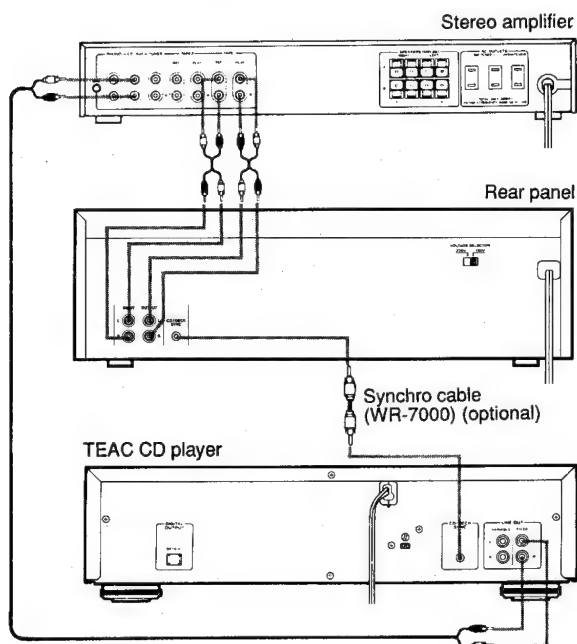
Notes:

- The settings of the INPUT control and DOLBY NR switch are ignored during dubbing as they have no effect.
- During NORMAL speed dubbing, only the STOP button of TAPE I operates and the STOP, REC MUTE and PAUSE buttons of TAPE II work. During HIGH speed dubbing, only the STOP button operates.
- The sound quality of the dubbed tape may be slightly worse than that of the original tape. For this reason, multigeneration dubbing is not recommended.
- If there is a TV set near the 202 MK III during high speed dubbing, it is possible that the TV's horizontal scanning frequency (15.75 kHz) may be recorded on the tape. If this occurs or to prevent it in advance, dub at normal speed, switch off the television or keep the deck a reasonable distance away from the TV.

CD Synchro Dubbing (TAPE II only)

By connecting the deck to a TEAC CD synchro compatible CD player which has a CD/DECK SYNC terminal on its rear panel, dubbing (recording) synchronized with the CD player is possible.

1. Connect the deck's CD/DECK SYNC terminal to the CD player's CD/DECK SYNC terminal using an optional cable (WR-7000) as illustrated below.



2. Perform programming of the "time edit", etc. functions of the CD player beforehand (refer to the instructions of the CD player).
3. Set the source to CD using the amplifier's source select buttons.
4. Set the recording level as explained in step 6, of "Recording with TAPE I and TAPE II" on page 11.
5. Set the deck and the CD player to the stop mode.
6. Press the CD SYNC button of the deck.

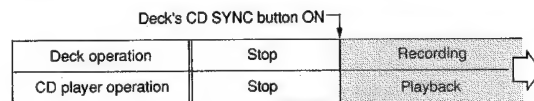
CD SYNC



The CD player will start automatically approx. 1 sec after the deck starts recording and dubbing will be performed. (The CD SYNC indicator lights.)

Start of CD synchro dubbing

The shaded portions (■) indicate the CD synchro dubbing mode in the following.

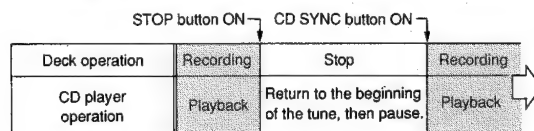


To stop temporarily during dubbing:

To temporarily stop CD synchro dubbing

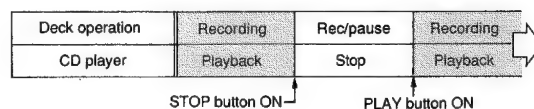
- (A) Press the STOP button of the deck. The CD player will return to the beginning of the current tune and pause there. To restart, press the deck's CD SYNC button.

(A: Operation of the deck)



- (B) Press the stop button of the CD player. The deck enters the rec/pause mode. To restart, press the CD player's play button.

(B: Operation at the CD player)



- * When the CD player has entered the pause mode, it stands by after returning to the beginning of the tune that has just been played.
- * When recording is done up to the end of the tape, the CD player stands by after returning to the beginning of the tune that has just been played.

Note

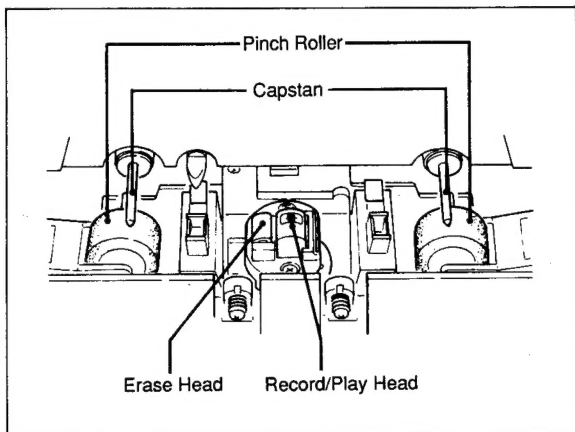
If the CD player is connected to the stereo amplifier using an optical cable, synchro dubbing is not possible. If synchro dubbing is required, you must connect the deck's analog output using pin plug cords.

MAINTENANCE

The heads and tape path should be cleaned and demagnetized periodically.

Cleaning Tape Path

- Apply head cleaning fluid* to a cotton bud or soft cloth, and lightly rub the heads, capstan and all metal parts in the tape path.
- Also clean the pinch roller using rubber cleaning fluid*.
- * Both are available in TEAC Tape Recorder Cleaning Kits HC-2 and RC-2 in the U.S.A. or TZ-261 in other areas.



Demagnetizing Heads

Be sure that the power is off. then demagnetize the heads using a TEAC E-3 demagnetizer. For details of its use, read its instructions.

TROUBLESHOOTING

Basic troubleshooting of a cassette tape deck is similar to troubleshooting any other electrical or electronic equipment. Always check the most obvious possible causes first. To give you a few ideas of what to look for, check the following:

- No power: Is the power cord connected?
- No audio output: Have all connections been made correctly?
- Low sound quality: Are the heads dirty or magnetized? Are you using good quality tape? Has the correct NR System been selected?
- Impossible to enter the record mode: Are the record protection tabs of the cassette in place?
- Impossible to enter the record mode: Are the record protection tabs of the cassette in place?
- Impossible to record from the LINE IN terminals: Is a microphone connected?

DOLBY HX PRO

Dolby HX Pro is an "active bias" technique that can improve the quality of audio tape recordings. High-level high frequencies can be recorded more accurately, without sacrificing the signal-to-noise ratio, while such side effects of tape saturation as distortion are reduced.

What Is Bias?

Bias is a very high-frequency signal generated within a tape deck and recorded on the tape simultaneously with the program material. This inaudible signal allows low noise, low distortion recording and a flat frequency response. Different magnetic tape formulations require different amounts of bias for optimum performance. If the bias level is too high, the high-frequency Maximum Output Level (MOL) decreases.

The Problem of Self-Bias

Unfortunately, the bias level is often influenced by the signal being recorded. The high frequency components of some music act as bias. This unpredictable source of bias is added to the existing bias, resulting in a loss of high-frequency response. As the high-frequency contents of the signal increase, the ability of the recorder to record high frequencies (MOL) decreases. This phenomenon is called self-biasing.

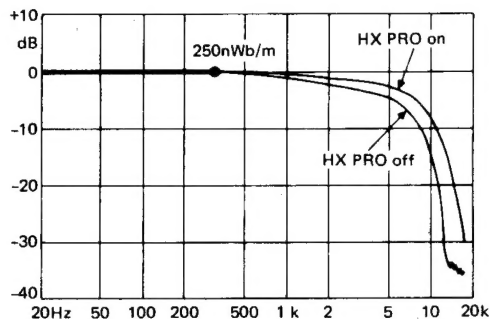
The Dolby HX Pro Solution

Dolby HX Pro monitors the high-frequency contents of the program and adjusts the recorder's bias oscillator to maintain a constant total bias level. The result is improved high-frequency response and lower distortion. Depending on the type of tape, the improvement in headroom (dynamic range) can be 6 dB or more.

The Benefits

With Dolby HX Pro, it is easier to make more accurate recordings of music which contains high-level high frequency components. The improvement is similar to that of high-performance tape over conventional tape, and regardless of the type of tape used, the results will sound better.

Most important of all, Dolby HX Pro requires no decoding process. Once a tape is recorded with it, the improvement will be realized when playing the tape back on any machine.



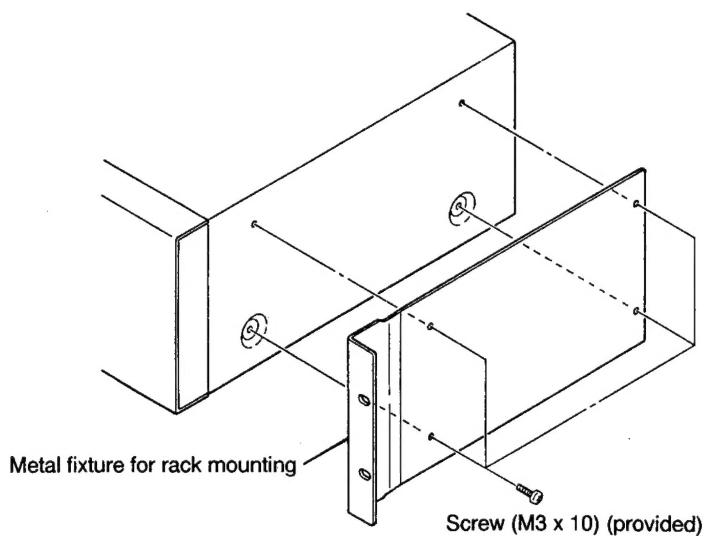
Example of improved frequency response using Dolby HX Pro function

INSTALLING THE UNIT INTO A RACK

This unit is provided with a metal fixture for rack mounting. Use it when installing the unit into a 19-inch rack.

How to install

- (1) Remove four screws fixing the panel to the unit.
(Do not open the panel.)
 - * Although the removed screws are not used to install the metal fixture for rack mounting, retain them for future use.
- (2) Place a metal fixture on the side of the unit (panel), then secure it using the provided four screws (M3 x 10).
- (3) In a similar way, install a metal fixture to the other side of the unit.
 - * See that the metal fixtures are flush with the top of the panel.



SPECIFICATIONS

Track System: 4-track, 2-channel stereo

Heads: 4; Deck I; 1 Erase and 1 Record/
Playback (rotating)
Deck II; 1 Erase and 1 Record/
Playback (rotating)

Type of Tape: Cassette tape C-60 and C-90 (Philips type)

Tape Speeds: 4.76 cm/sec (1-7/8 ips)
9.5 cm/sec (3-3/4 ips; in Hi-Speed Dub)

Motors: 2 DC Servo motors (1 ea. Deck)

Wow and Flutter (WRMS): 0.06%

Frequency Response (Overall, -20 dB):

25 – 19,000 Hz, Metal tape
25 – 18,000 Hz, CrO₂ tape
25 – 17,000 Hz, Normal tape

Signal-to-Noise Ratio (Overall):

59 dB (NR off, 3% THD Level, Weighted)
69 dB (Dolby B NR on, over 5 kHz)
79 dB (Dolby C NR on, over 1 kHz)

Fast Winding Time: Approximately 110 seconds for C-60

Inputs: Line: 97 mV, 50k ohms

Mic: 0.38 mV, 200 ohms

Outputs: Line: 0.52 V for load impedance of 50k ohms or more

Headphones: 8 ohms

Power Requirements:

120/230 V AC, 50/60 Hz

(General Export Model)

120 V AC, 60 Hz

(U.S.A./Canada Model)

230 V AC, 50 Hz (Europe Model)

240 V AC, 50 Hz

(UK/Australia Model)

Power Consumption : 15 W

Dimensions (W x H x D):

435 x 144 x 284 mm

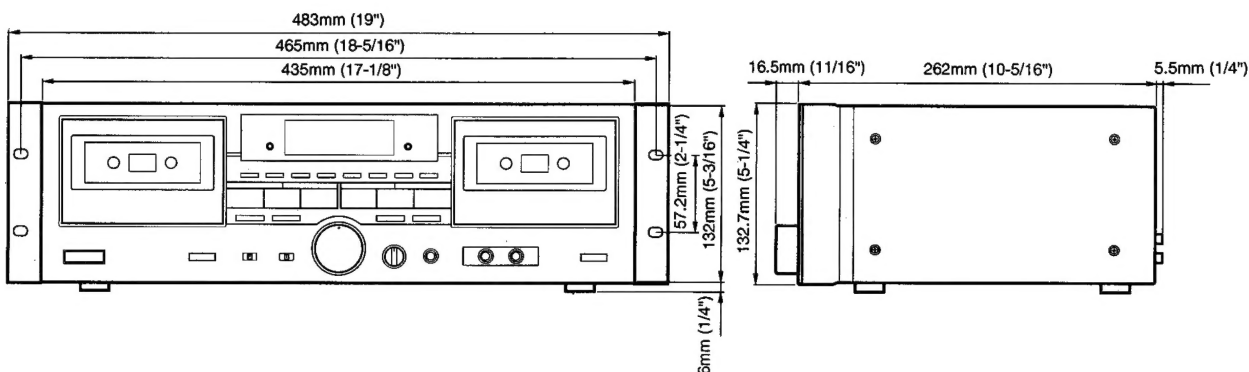
(17-1/8" x 5-11/16" x 11-3/16")

Weight (net): 4.8 kg (10-9/16 lbs.)

Standard Accessories: Input-output connection cords

- Specifications were determined using metal tape except as noted.
- Improvements may result in specification or feature changing without notice.

THE APPLIANCE CONFORMS WITH EEC
DIRECTIVE 87/308/EEC REGARDING INTER-
FERENCE SUPPRESSION



TASCAM

TEAC Professional Division

202MKIII

For CANADA

THIS DIGITAL APPARATUS DOES NOT EXCEED THE CLASS B LIMITS FOR RADIO NOISE EMISSIONS FROM DIGITAL APPARATUS AS SET OUT IN THE RADIO INTERFERENCE REGULATIONS OF THE CANADIAN DEPARTMENT OF COMMUNICATIONS.

LE PRÉSENT APPAREIL NUMÉRIQUE N'ÉMET PAS DE BRUITS RADIOÉLECTRIQUES DÉPASSANT LES LIMITES APPLICABLES AUX APPAREILS NUMÉRIQUES DE CLASSE B PRÉSCRITES DANS LE RÉGLEMENT SUR LE BROUILLAGE RADIO-ÉLECTRIQUE ÉDICTÉ PAR LE MINISTÈRE DES COMMUNICATIONS DU CANADA.

For CANADA

AC POWER CORD CONNECTION

CAUTION :
TO PREVENT ELECTRIC SHOCK MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

CORDE DE CONNEXION CA

ATTENTION :
POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU' AU FOND.

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